

REMARKS

Claim 44 is amended. Claims 35-45 are pending in the application.

Claims 35-45 stand provisionally rejected on the grounds of nonstatutory obviousness-type double patenting as being unpatentable over various claims pending in Applications 11/078,537 and 11/078,822. The obviousness-type double patenting rejection is maintained from the previous action. As noted in applicant's previous response, the double patenting rejection is improper since each of the cited co-pending applications are divisionals of the present application. Each of the two divisionals resulted from a restriction request by the Examiner upon indication by the Examiner that the claims now pending in each of the two co-pending applications are patentably distinct from the present application. Accordingly, the obviousness-type double patenting rejection of the present claims is improper. Further, the Examiner has not addressed applicant's arguments regarding this issue presented in applicant's previous response. Accordingly, the finality of the present action is premature.

Claims 35-40 and 42-43 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Chiang (U.S. Patent No. 6,800,173). This rejection is maintained from the previous action. However, the applicant's arguments presented regarding this rejection have not been addressed by the Examiner.

The Examiner is reminded by direction to MPEP § 2131 that anticipation requires each and every element of a claim to be disclosed in a single prior art reference. Claims 35-40 and 42-43 are allowable over Chiang for at least the reason that Chiang fails to disclose each and every element in any of those claims. Referring to independent claim 35, such recites utilization of one or both of an electric field gradient and a magnetic field gradient to align non-ionized and electrically neutral molecules during atomic layer

deposition. As acknowledged by the Examiner at pages 5-6 of the present action, Chiang does not teach non-ionized and electrically neutral molecules. Accordingly, independent claim 35 is not anticipated by Chiang.

Dependent claims 36-40 and 42-43 are not anticipated by Chiang for at least the reason that they depend from non-anticipated base claim 35.

Claims 35-45 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Chiang individually or in combination with Norman (U.S. Patent No. 6,869,876). The Examiner is reminded by direction to MPEP § 2143 that a proper obviousness rejection has the following three requirements: 1) there must be some suggestion or motivation to modify or combine reference teachings; 2) there must be a reasonable expectation of success; and 3) the combined references must teach or suggest all of the claim limitations. Claims 35-45 are allowable over Chiang and over the combination of Chiang and Norman for at least the reason that the references, individually or as combined, fail to disclose or suggest each and every element in any of those claims, fail to provide motivation for modification and fail to provide a reasonable expectation of success.

As indicated above, claim 35 recites aligning non-ionized and electrically neutral molecules during atomic layer deposition utilizing one or both of an electric field gradient and a magnetic field gradient. As amended, independent claim 44 recites at least one of first molecules and second molecules being non-ionic and electrically neutral. The amendment to claim 44 is supported by the specification at, for example, paragraph 26. As discussed above with respect to independent claim 35, and as acknowledged by the Examiner at pages 5-6 of the present action, Chiang does not teach utilization of non-ionized and electrically neutral molecules. Further, Chiang specifically indicates methodology is developed for and utilizes ionized species for deposition (col. 9, ll. 10-34;

col. 19, ll. 33-45; col. 20, ll. 22-38; col. 24, ll. 29-52; col. 27, ll. 31-35; col. 28, ll. 10-23). Accordingly, the specific teaching of Chiang for utilization of ionized species does not provide motivation for modification or provide a reasonable expectation of success for alignment of non-ionized and electrically neutral molecules as recited in each of independent claims 35 and 44.

The Examiner indicates reliance on the Norman reference for teaching use of ammonia as a precursor. However, as combined with Chiang, the Norman teaching of ammonia does not contribute toward suggesting the claim 35 and 44 recited alignment of non-ionized and electrically neutral molecules during atomic layer deposition. Nor does Norman provide motivation for combination or contribute toward providing a reasonable expectation of success. Therefore a *prima facie* case of obviousness has not been established regarding claims 35 and 44. Accordingly, claims 35 and 44 are allowable over the art of record.

Dependent claims 36-43 and 45 are allowable over Chiang individually or in combination with Norman for at least the reason that they depend from corresponding allowable base claims 35 and 44.

For the reasons discussed above, pending claims 35-45 are allowable. Accordingly, applicant respectfully requests formal allowance of such claims in the Examiner's next action.

Respectfully submitted,

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By: Jennifer J. Taylor
Jennifer J. Taylor, Ph.D.
Reg. No. 46,711